

Background of invention:

The system is one of the most economical methods of harnessing the radiation from the sun. The system acts like a huge magnifying glass or a dish in the size of the primary reflector which is focused to produce energy.

Most of the related US Patents are based on heating from the top where sun energy is collected and others use parabolic dish type collectors to collect solar radiation.

US Pat No.3938497 to Andrassy discloses a moveable apparatus to find a favorable position of the sun. Likewise US Pat. No 4,111,184 discloses how a parabolic reflector is adjusted to the sun.

US Pat. No. 4,249,511 to Krisst et al. discloses a parabolic dish reflector which acts as a grill in focal point.

US Pat. No. 4,696,285 to Zwach discloses a primary and a secondary parabolic dish which reflect the radiation from the top.

US Pat. No. 4,848,320 to Burn et al. discloses a collapsible reflector with a self-leveling tray to keep the food level within the interior of the oven.

US Pat. No. 4,841,946 to Marks discloses dish type solar collector an heater and the movements of the unit is controlled electronically.

Summary

The design is a solar heating and cooking system which uses a curved (bent) flat sheet of reflector material and reflects a line to a secondary much smaller reflector, which in turn reflects the line to a point. The system heats and cooks from the top and from the bottom just like a grill.

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Solar Cooker & Heater

Brief description of the drawings:

Fig. 1 show the principle of operation.

Fig. 2 shows the side view of the system.

Fig. 3 shows the close up of secondary reflector in a housing unit.

Fig. 4 shows a photo of a prototype where the temperature reached over 400 degrees f under glass cover in open air.